

Miscellaneous Cabinet.

NON QUO, SED QUOMODO.

VOL. I.] SCHENECTADY, SATURDAY, SEPTEMBER 20, 1823. [NO. 11.

FEMALE EDUCATION.

ARTICLE III.—CONTINUED.

What is it advantageous for a Woman to know?

If it be advantageous for a female to be able to express her ideas with grace, it is not less so to know how to *write her thoughts*. If obliged to pursue any affair of business she can always employ a lawyer to compose her letters and memorials; but it seems to me that their effect will be more striking, when she produces them herself. Females no more resemble men in their minds, than in their exterior form. Their productions always bear the *characteristics of sex*; and the man in place will necessarily read a memorial with more interest when he recognizes in every phrase, the tender, modest, and interesting eloquence of woman.

Let me not be accused here, of attempting to excite in females, more than they have received from nature, since we find them, not unfrequently, pursuing affairs the most difficult and embarrassing, with activity, intelligence and success. In all this article, I have supposed a woman to have unhappily lost her husband; but even when she is spared that sorrow, is it not highly advantageous to both, to be able to consult together on their common interests? Such mutual communications strengthen the bond of union, and the thought that he has a second self, who can supply his place and pursue his designs, is to a husband, an additional motive of tranquillity.

It may perhaps be alleged that learning renders a female proud and imperious; but this is the effect of slender acquirements, and glozed ignorance, not of real information. Studies well directed, while they induce a just habit of thinking, enable the mind to make a proper estimate of its own worth, and a female who is well instructed in the duties she owes to society, knows that her light should be like that of a lamp, to illuminate the interior of her house, not like a beacon on the border of the sea.

The reading of books, written with profound wisdom and sagacity, is, without doubt, that which contributes most efficiently to perfect the understanding, and form a just and rational mind; but these works, equally rare and precious, are only within the reach of a certain number of persons, and those of mature age. It is therefore impossible to have recourse to them during the time of education. This is a harvest reserved to the summer of life, while the spring produces only verdure and flowers. In the arts, one can, perhaps, by assiduity and labour, hasten, more

or less, the progress of a pupil; but where the question is, to form the judgement, it is injudicious to demand the fruit too early, and here again the labourer may serve for a model; he prepares the ground, sows the best grain he can procure, and confides the rest to nature and the slow hand of time.

A child should have the reason of a child, and though this reason may sometimes be much superior to what we generally suppose it capable of, it is still but as the blossoms of the almond tree, a promise of luxuriant fruitage. To find pleasure and profit from the reading of serious books, it is necessary to understand them perfectly, otherwise they only cause fatigue and *ennui*. This reading supposes some preliminary knowledge, to acquire which is the business of education.

We must put children in the path that conducts to science, but if, in guiding them towards her temple, we force them to climb painfully up the steep acclivities, where thorns and rocks obstruct the way, their genius will fade, their imagination lose its brightness, and that innocent gaiety so precious to preserve, will be sullied and destroyed. In conducting them along the journey then, let us choose a smooth declivity. The first steps are always difficult. Let us then cast over the briars an abundance of flowers, so that, if the delicate fingers of infancy are wounded by a thorn, the pleasure of having found a rose may make them forget the pain. If it is next to impossible so to conduct the business of education that no tears may be shed over their lessons, it is necessary, at least, that smiles should be blended, so that, weeping and laughing together, they may go on a little farther, to find another flower, at the risk of being wounded again. A day will come, perhaps, when neither thorns nor roses will be remembered, and they will only see the happiness of approaching to the light of truth.

From this period, study ceases to be a *taste*, and becomes a passion. But it seems that nature has rendered this passion somewhat rare in females, probably not at all to the detriment of society.

ORTHOEPY.

FOR THE MISCELLANEOUS CABINET.

NO. III.

"He would shoot her—I have not the least doubt of it; I do not know one would be more likely to do it."

"Your description of him seems very much like the thing, certainly; and if he be capable of all you have ascribed to him, I know not why we need look any further. I will see that he have the *chance*."

What, what, said I; hist!—a conspiracy for an assassination? What envied beauty now must fall beneath the hireling's bloody hand? Although not apt to play the eaves-dropper, I listened, (and who could blame me in such circumstances) until convinced that, instead of an assassination, the business on the tapis was really a good-natured plan for a matrimonial alliance! Fudge! I was off in a tangent! But my blood boiled, and my heart thumped, hammer and sledge, for a quarter of an hour.

Now, why is it necessary, sir, that a suspicion should be aroused, that an alarm should be excited, or even that an ear should be offended in this manner, by an incorrect pronunciation? Had the gentleman been polite enough—stay, he is certainly a polite gentleman; and yet, to be polite, should not a man speak politely? Pass that for the present.—Had the gentleman said, "*he would suit her*," I should have been spared this alarm—I should not have been interrupted in my ramble—I probably should not have even *heard* that which was "*none of my business*," and perhaps, should not have been so readily furnished with matter for this squib. One thing is almost certain—I should not have been so quickly out of breath.

Yours in trepidation,

TIM TONGUE.

Science, Arts, &c.

From the Boston Journal of Philosophy and the Arts.

On Sounds inaudible by certain Ears.—By WILLIAM HYDE WOLLASTON, M.D. F.R.S. [Philosophical Transactions.]

It is not my intention to occupy the time of this society with the consideration of that mere general dulness to the impression of all kinds of sounds which constitutes ordinary deafness; but to request its attention to certain peculiarities that I have observed with respect to partial insensibility in different states of the ear, and in different individuals; for I have found that an ear, which would be considered as perfect with regard to the generality of sounds, may at the same time, be completely insensible to such as are at one or the other extremity of the scale of musical notes, the hearing or not hearing of which seems to depend

wholly on the pitch or frequency of vibration constituting the note, and not upon the intensity or loudness of the noise.

Indeed, although persons labouring under common deafness have an imperfect perception of all sounds, the degree of indistinctness of different sounds is commonly not the same; for it will be found upon examination, that they usually hear sharp sounds much better than low ones; they distinguish the voices of women and children better than the deeper tones in which men commonly speak; and it may be remarked that the generality of persons accustomed to speak to those who are deaf, seem practically aware of this difference and even without reflecting upon the motives which guide them, acquire a habit of speaking to deaf persons in a shriller tone of voice, as a method by which they succeed in making them hear more effectually than by merely speaking louder.

In elucidation of this state of hearing, which casually occurs as a malady, I have observed that other ears may for a time be reduced to the same state of insensibility to low sounds. I was originally led to this observation, in endeavouring to investigate the cause of deafness in a friend, by trial of different modes of closing, or otherwise lessening the sensibility of my own ears. I remarked, that when the mouth and nose are shut, the tympanum may be so exhausted by a forcible attempt to take breath by expansion of the chest, that the pressure of the external air is strongly felt upon the membrana tympani, and that, in this state of tension from external pressure, the ear becomes insensible to grave tones, without losing, in any degree the perception of sharper sounds.

The state to which the ear is thus reduced by exhaustion, may even be preserved for a certain time, without the continued effort of inspiration, and without even stopping the breath, since, by sudden cessation of the effort, the internal passage to the ear becomes closed by the flexibility of the Eustachian tube, which acts as a valve, and prevents the return of air into the tympanum. As the defect thus occasioned is voluntary, so also is the remedy; for the unpleasant sensation of pressure on the drum, and the partial deafness which accompanies it, may at any instant be removed by the act of swallowing, which opens the tube, and by allowing the air to enter, restores the equilibrium of pressure necessary to the due performance of the functions of the ear.

In my endeavours to ascertain the extent to which this kind of deafness may be carried, some doubt has arisen, from the difficulty of finding sounds sufficiently pure for the purpose. The sounds of stringed instruments are in this respect defective; for unless the notes

produced are free from any intermixture of their sharper chords, some degree of deception is very liable to occur in the estimate of the lowest note really heard. I can, nevertheless, with considerable confidence, say, that my own ears may be rendered insensible to all sounds below F marked by the bass clef. But as I have been in the habit of making the experiment frequently, it is probable that other persons who may be inclined to repeat it, will not, with equal facility, effect so high a degree of exhaustion as I have done. To a moderate extent the experiment is not difficult, and well worth making. The effect is singularly striking, and may aptly be compared to the mechanical separation of larger and smaller bodies by a sieve. If I strike the table before me with the end of my finger, the whole board sounds with a deep dull note. If I strike it with my nail, there is also at the same time a sharp sound produced by quicker vibrations of parts around the point of contact. When the ear is exhausted, it hears only the latter sound, without perceiving in any degree the deeper note of the whole table. In the same manner, in listening to the sound of a carriage, the deeper rumbling noise of the body is no longer heard by an exhausted ear; but the rattle of a chain or loose screw remains at least as audible as before exhaustion.

Although I cannot propose such an experiment as a means of improving the effect of good music, yet, as a source of amusement, even from a defective performance, I have occasionally tried it at a concert with a singular effect; since none of the sharper sounds are lost, but by the suppression of a great mass of louder sounds, the shriller ones are so much the more distinctly perceived, even to the rattling of the keys of a bad instrument, or scraping of catgut unskillfully touched.

Those who attempt exhaustion of the ear for the first time, rarely have any difficulty in making themselves sensible of the external pressure on the tympanum; but it is not easy at first, to relax the effort of inspiration with sufficient suddenness to close the Eustachian tube, and thus maintain the exhaustion; neither is it very easy to refrain long together from swallowing the saliva, which instantly puts an end to the experiment.

I may here remark that this state of excessive tension of the tympanum is sometimes produced by sudden increase of external pressure, as well as by decrease of that within, as is often felt in the diving-bell as soon as it touches the water; the pressure of which upon the included air closes the Eustachian tube, and, in proportion to the descent, occasions a degree of tension on the tympanum, that becomes distressing to persons who have not learned to obviate this inconvenience. Those

who are accustomed to descend, probably acquire the art of opening the Eustachian tube by swallowing or incipient yawning, as soon as the diving-bell touches the water.

It seems highly probable, that in the state of artificial tension thus produced, a corresponding deafness to low tones is occasioned; but as I never have been in that situation, I have not had an opportunity of ascertaining this point by direct experiment.

In the natural healthy state of the human ear, there does not seem to be any strict limit to our power of discerning low sounds. In listening to those pulsatory vibrations of the air, of which sounds consist, if they become less and less frequent, we may doubt at what point tones suited to produce any musical effect terminate; yet all persons but those whose organs are palpably defective, continue sensible of vibratory motion, until it becomes a mere tremor, which may be felt and even almost counted.

On the contrary, if we turn our attention to the opposite extremity of the scale of audible sounds, and, with a series of pipes, exceeding each other in sharpness, if we examine the effects of them successively upon the ears of a number of persons, we shall find (even within the range of those tones which are produced for their musical effects) a very distinct and striking difference between the powers of different individuals, whose organs of hearing are in other respects perfect, and shall have reason to infer, that human hearing in general is more confined than has been supposed, with regard to its perception of very acute sounds, and has probably in every instance, some definite limit, at no great distance beyond the sounds ordinarily heard.

It is now some years since I first had occasion to notice this species of partial deafness, which I at that time supposed to be peculiar to the individual in whom I observed it. While I was endeavoring to estimate the pitch of certain sharp sounds, I remarked in one of my friends, a total insensibility to the sound of a small organ pipe, which, in respect to acuteness was far within the limits of my own hearing, as well as of others of our acquaintance. By subsequent examination, we found that his sense of hearing terminated at a note four octaves above the middle E of the piano-forte. This note he seemed to hear rather imperfectly, but he could not hear the F, next above it, although his hearing is in other respects as perfect, and his perception of musical pitch as correct, as that of any ordinary ears.

The casual observation of this peculiarity in the organ of hearing, soon brought to my recollection a similar incapacity in a near relation of my own, whom I very well remember to have said, when I was a boy, that she never

could hear the chirping that commonly occurs in hedges during a summer's evening, which I believe to be that of the *gryllus campestris*.

I have reason to think that a sister of the person last alluded to, had the same peculiarity of hearing, although neither of them were in any degree deaf to common sounds.

The next case which came to my knowledge was in some degree more remarkable, in as much as the deafness in all probability extended a note or two lower than in the first instance. This information is derived from two ladies of my acquaintance, who agree that their father could never hear the chirping of the common house-sparrow. This is the lowest limit to acute hearing that I have met with, and I believe it to be extremely rare. Deafness even to the chirping of the house-cricket, which is several notes higher, is not common. Inability to hear the piercing squeak of the bat seems not very rare, as I have met with several instances of persons not aware of such a sound. The chirping which I suppose to be that of the *gryllus campestris*, appears to be rather higher than that of the bat, and accordingly will approach the limit of a greater number of ears; for, as far as I am yet able to estimate, human hearing in general extends but a few notes above this pitch. I cannot, however, measure these sounds with precision; for it is difficult to make a pipe to sound such notes, and still more difficult to appreciate the degree of their acuteness.

The chirping of the sparrow will vary somewhat in its pitch, but seems to be about four octaves above E in the middle of the piano-forte.

The note of the bat may be stated at a full octave higher than the sparrow, and I believe that some insects may reach as far as one octave more; for there are sounds decidedly higher than that of a small pipe, one-fourth of an inch in length, which cannot be far from six octaves above the middle E. But since this pipe is at the limit of my own hearing, I cannot judge how much the note to which I allude might exceed it in acuteness, as my knowledge of the existence of this sound is derived wholly from some young friends who were present, and heard a chirping, when I was not aware of any sound. I suppose it to have been the cry of some species of *gryllus*, and I imagine it to differ from the *gryllus campestris*, because I have often heard the cry of that insect perfectly.

From the numerous instances in which I have now witnessed the limit to acuteness of hearing, and from the distinct succession of steps that I might enumerate in the hearing of different friends, as the result of various trials that I have made among them, I am inclined to think that at the limit of hearing, the inter-

val of a single note between two sounds, may be sufficient to render the higher note inaudible, although the lower note is heard distinctly.

The suddenness of the transition from perfect hearing to total want of perception, occasions a degree of surprise, which renders an experiment on this subject with a series of small pipes, among several persons, rather amusing. It is curious to observe the change of feeling manifested by various individuals of a party in succession, as the sounds approach and pass the limits of their hearing. Those who enjoy a temporary triumph, are often compelled in turn to acknowledge to how short a distance their little superiority extends.

Though it has not yet occurred to me to observe a limit to the hearing of sharp sound in any person under twenty years of age, I am persuaded, by the account I have received from others, that the youngest ears are liable to the same kind of insensibility. I have conversed with more than one person who never heard the cricket or the bat, and it appears far more likely that such sounds were always beyond their powers of perception, than that they never had been uttered in their presence.

The range of human hearing comprised between the lowest notes of the organ and the highest known cry of insects, includes more than nine octaves, the whole of which are distinctly perceptible by most ears, although the vibrations of a note at the higher extreme are six or seven hundred fold more frequent than those which constitute the gravest audible sound.

Since there is nothing in the constitution of the atmosphere to prevent the existence of vibrations incomparably more frequent than any of which we are conscious, we may imagine that animals like the *grylli*, whose powers appear to commence nearly where ours terminate, may have the faculty of hearing still sharper sounds, which at present we do not know to exist; and that there may be other insects hearing nothing in common with us, but endued with a power of exciting, and a sense that perceives vibrations of the same nature indeed, as those which constitute our ordinary sounds, but so remote, that the animals who perceive them may be said to possess another sense, agreeing with our own solely in the medium by which it is excited, and possibly wholly unaffected by those slower vibrations of which we are sensible.

Missionary.

MISSIONARY STATIONS.

[CONCLUDED.]

SILHET. In Bengal, 310 miles N. E. of Calcutta.

Baptist Missionary Society.—1813.
John Le Silva, a Portuguese.

STELLENBOSCH. In South Africa—
26 miles from Cape Town.

London Missionary Society.—1802.

J. Bakker.

SURAT. A large city in India, on the western side of the Peninsula—embracing a population of half a million.

Baptist Missionary Society.—1812.

C. Carapeit Aratoon, *Armenian.*

London Missionary Society.—1815.

James Skinner, Wm. Fyvie.

TANJORE. A city in the southern Carnatic, in the Indian peninsula.

Christian Knowledge Society.—1766.

John Casper Kolhoff.

Adeykalam, Nanaparagason, and Abraham, *Native Priests.*

TELLICHERRY. A town on the western coast of the peninsula of India.

Church Missionary Society.—1817.

Baptiste, *Native Schoolmaster.*

THEOPOLIS. In South Africa, 600 miles E. of Cape Town.

London Missionary Society.—1814.

J. G. Ulbricht, G. Baker.

TITALYA. In India; northern part of Rungpore, on the borders towards Nepaul.

Church Missionary Society.—1816.

F. C. G. Schroeter.

TOBAGO. An island in the W. Indies.

Wesleyan Missions.

Moses Rayner.

TRANQUEBAR. A Danish settlement on the east coast of the Indian peninsula.

Royal Danish Mission College.—1705.

Augustus Caemmerer, — Schreivogel.

Church Missionary Society.—1816.

John Christian Schnarre, *Missionary and Inspector of Schools.*

John Devasagayam, *Superintendent of Schools.* David, *Catechist.*

TRAVANCORE, (South) A province at the southern extremity of the Indian peninsula.

London Missionary Society.—1805.

Richard Kmill, Charles Mead.

TRICHINOPOLY. A town in the southern Carnatic, in the Indian Peninsula.

Christian Knowledge Society.—1766.

J. C. Kolhoff, *pro tempore.*

TRINIDAD. An island in the W. Indies.

Wesleyan Missions.—1788.

Samuel P. Woolley.

London Missionary Society.

Thomas Adam, James Mercer.

TULBACH DROSDY. In South Africa, 40 miles N. of Cape Town.

London Missionary Society.

Ariel Vos, C. Kramer, J. Taylor,

VADADELLI. In India, 25 miles N. of Madras.

Church Missionary Society.—1817.

Sandappen, *Native.*

VELLORE. A town in India, 90 miles S. W. of Madras.

Church Missionary Society.

Rev. E. M. J. Jackson.

VEPERY. In India, near Madras.

Christian Knowledge Society.—1727.

Rev. Dr. Rottler.

ST. VINCENTS. An island in the W. Indies.

Wesleyan Missions.—1787.

J. Mortier, S. Brown, W. Ames.

VIRGIN ISLANDS. A groupe of islands in the West Indies.

Wesleyan Missions.—1788.

James Whitworth, George Jackson, John Colmer.

VIZAGAPATAM. A town in India, on the sea coast of the northern Circars; 483 miles from Madras, and 557 from Calcutta.

London Missionary Society.—1805.

John Gordon, Edward Pritchett, James Dawson.

Summary.

From the Troy Sentinel.

PHI BETA KAPPA SOCIETY.

We have read with no small interest, the account of the celebration of the recent anniversary of the Phi Beta Kappa Society at Cambridge, Mass. The tone of feeling which prevailed, as manifested by the sentiments pledged in the wine cup were every way proper to the occasion, and were the genuine expressions of the magnanimous spirit generated by liberal studies. It appears there were present many gentleman of talents, learning, and eminence in civil life, from different portions of our great confederacy, and among them the late chancellor of this state was an honoured guest. The effects of the increased, and rapidly increasing facilities of intercourse from the remotest extremities of our country, are fast developing themselves, and promise the most auspicious results; and it appears to us that in no form of its operation is this intercourse likely to be more efficacious in producing good, than through the medium of these great literary festivals. They call together the wise and learned of the land, who, in their free and liberal communion, forget their local prejudices, and narrow motives of sect and party. The men assembled on these occasions are they, who for the most part, give character to public opinion; who administer our governments, dispense the laws, define and defend public and private rights, expound and enforce the doctrines and precepts of our holy religion, and make our literature. They and their successors have in charge the great interests of learning and morals, and the standard of general education is by them to be elevated or depressed. What mighty means are at their disposal! They have the development and formation of the mind of the nation.

The permanent character of coming generations is destined to depend mainly upon them, for in their control are all the great moral agents of government, law, literature, and religion. How important, then, is it, that such men should look upon one another, and upon the respective portions of the great American community, through the clear medium of liberal feelings, and in the spirit of amity! The ordinary course of things in this busy practical life which our countrymen lead, will necessarily prevent a frequent recurrence of such occasions, so that whenever they do occur, it is almost a duty to embrace them; for those who meet in such liberalising intercourse, can hardly separate without being conscious that their patriotic, as well as social sympathies, are enlarged and strengthened.

In the notice of this anniversary, in the Boston papers, honourable allusion is made to the branch of the society, in the state of New-York. The literary performances are highly spoken of, especially the poem, the subject of which was "Rome" and its various fortunes. Among the toasts drank at the table were the following.

The Republic of Letters.—Other republics may decay, but this is *spiritual*, and will endure for ever.

The happy climate of New-York, whose citizens enjoy their physical vigour, and intellectual pre-eminence, after they are constitutionally superannuated.

[This allusion to Chancellor Kent was received with long continued acclamations.]

The happiest of all junctions of the constellations—the union of literary men.

[By Chancellor Kent.] *Harvard University.*—Perpetual gratitude to its wise and benevolent founders.

The History of the United States.—May the pages which record their literary progress, be as bright as those which recount their military and civil achievements.

The venerable Adams.—Devoting his last energies to perfecting the constitution of his native state. *Hic cæstus artemque repono.*

The Free Schools of New-England.—The Pilgrims' Patent for a free state.

The five Alphas of our country.—The Holy Alliance, which wages perpetual war against ignorance and false taste.

[By Henry Wheaton Esq. of New-York.]—*The National and State Judiciaries.*—May there be no other rivalry between them, than that of sound law and incorruptible justice.

The Literary Manufactures of our country—which can flourish without the protection of an exclusive tariff.

The Stars on our Medal.—May their numbers increase till their splendour shall enlighten the regions from the Atlantic to the Pacific.

Our Southern Brethren—who adorn our meetings with their law, their literature, and their wit.

Social Feelings.—Like pearls in the water, the flood which flows over them enhances their brilliancy.

The triumphs of American genius, associated with the name of Jacob Perkins.—We have discharged our debt to Europe—Columbus discovered worlds, Perkins joins them together.

The Grecian Cross.—May it advance from village to village, and from steeple to steeple, till it rests on the dome of St. Sophia.

The President of the Society, Judge Story, gave as a toast—*Our distinguished guest*, who has so administered the law of the land, as to make New-York the land of the law.

The guest replied, by giving—"Massachusetts, the land of Story, as well as of Song."

The annual commencement at Middlebury college took place on the 20th ult. The class graduated consisted of 17. The degree of A. M. was conferred on 9; and the degree of M. D. on 17 persons, from the Vermont Academy of Medicine at Castleton, which is connected with Middlebury college.

The degree of Doctor of Divinity was conferred on the Rev. Bennett Tyler, President of Dartmouth college, Rev. Heman Humphrey of Pittsfield, and president elect of the collegiate institution at Amherst, and Rev. Henry Axtell, of Geneva, in the state of New-York; and the degree of Doctor of Laws on the Hon. John V. Henry, of Albany.

This institution is said to be flourishing.

Princeton College.—On the 6th inst. the Rev. Dr. CARNAHAN was installed in the office of President of this institution. The performances were commenced with prayer by the Rev. Dr. Woodhull. The Chief Justice of New-Jersey administered the usual oaths, and after an appropriate address by the Rev. Dr. Miller, the Chief Justice delivered to Dr. Carnahan the key of the college and a copy of the laws, and declared him President of the College of New-Jersey—whereupon the Doctor ascended the pulpit and delivered a Latin Discourse.—*Patriot.*

From the N. Y. Commercial Advertiser
PERCIVAL'S POEMS.

It will be recollected that in the early part of last winter, Mr. Wiley of this city, issued proposals for publishing a beautiful edition of the principal poems of Dr. Percival. A very respectable subscription list was soon collected in this city; but the work has unavoidably been delayed, by circumstances beyond the control of the publisher. We take pleasure, however, in announcing that the volume has at